

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Keith R. Obert on 05/27/08.

3. The application has been amended as follows:

1. *(currently amended)* A method for controlling interfrequency handovers of a mobile station, the mobile station comprising a continuous communication mode and a combined slotted communication mode and measurement mode, the method comprising:

changing the operation of the mobile station into the combined slotted communication mode and measurement mode for preparing an interfrequency handover, if at least a criterion specifying that a quality of a downlink signal relating to a channel on which communication takes place between the mobile station and a mobile communication system in the continuous communication mode is worse than a quality represented by a first target value, is fulfilled, and updating the first target value at first time instants of those time instants at which a second target value is updated by the power control manner of the transmission power, wherein the first target value depends on the second target value, the second target value being related to an outer loop power control of a transmission power of the downlink signal.

2. *(cancelled)*

3. *(currently amended)* A method according to claim ~~[[2]]~~ 1, wherein the first target value is updated for every radio frame.

4. *(currently amended)* A method according to claim ~~[[2]]~~ 1, wherein the first target value is updated for every interleaving period.

5. *(previously presented)* A method according to claim 1, wherein the first target value is equal to the second target value.

6. *(previously presented)* A method according to claim 1, wherein the first target value corresponds to a worse quality than the second target value.

7. *(previously presented)* A method according to claim 1, wherein the value for the quality represented by a first target value is determined for every time slot.

8. *(previously presented)* A method according to claim 1, wherein a further criterion specifies that the criterion is to be fulfilled for a certain first predetermined time period.

9. *(previously presented)* A method according to claim 1, further comprising:
estimating adjacent channel interference on the channel on which communication takes place in the continuous communication mode.

10. *(original)* A method according to claim 9, wherein said adjacent channel interference is estimated, if the determined value for the quality represented by a first target value is below a predetermined value.

11. *(previously presented)* A method according to claim 9, further comprising:
measuring interference on an adjacent channel in the combined slotted communication and measurement mode.

12. *(previously presented)* A method according to claim 1, further comprising:

performing an interfrequency handover to a second channel, and after entering a continuous mode in the second channel, inhibiting a further interfrequency handover for a certain second predetermined time period.

13. *(previously presented)* A method according to claim 1, further comprising:

performing preparatory measurements for an interfrequency handover in the combined slotted communication mode and measurement mode.

14. *(previously presented)* A method according to claim 13, comprising: in the combined slotted communication mode and measurement mode, synchronizing the mobile station with at least one base station before selection of a target frequency and/or the target base station(s) for the interfrequency handover.

15. *(previously presented)* A method according to claim 14, further comprising:

sending a request for the interfrequency handover to the cellular radio system from the mobile station, and wherein synchronization is performed after sending the request.

16. *(previously presented)* A method according to claim 14, further comprising:

triggering, based on said preparatory measurements, the synchronization of the mobile station with the at least one base station.

17. *(previously presented)* A method according to claim 14, wherein the mobile station is synchronized in at least one available target frequency with each base station relating to which said preparatory measurements are made.

18. *(previously presented)* A method according to claim 14, wherein the mobile station is synchronized in at least one available target frequency with at least two base stations.

19. *(original)* A method according to claim 18, wherein said at least two base stations belong to the active set of the mobile station.

20. *(original)* A method according to claim 19, wherein the synchronization is performed with all base stations belonging to the active set of the mobile station.

21. *(previously presented)* A method according to claim 19, further comprising: performing the interfrequency handover to all base stations belonging to the active set of the mobile station.

22. *(previously presented)* A method according to claim 18, comprising: performing the interfrequency handover to said at least two base stations.

23. *(original)* A method according to claim 1, wherein the loop based power control manner is adapted to control the quality of the connection by setting the target value for an inner loop of a closed loop power control.

24. *(canceled)*

25. *(canceled)*

26. *(canceled)*

27. *(canceled)*

28. (new) An apparatus for controlling interfrequency handovers of a mobile station comprising a continuous communication mode and a combined slotted communication mode and measurement mode, comprising:

a control block for changing the operation of the mobile station into the combined slotted communication mode and measurement mode for preparing an interfrequency handover, if at least a criterion specifying that a quality of a downlink signal relating to a channel on which communication takes place between the mobile station and a mobile communication system in the continuous communication mode is worse than a quality represented by a first target value, is fulfilled, and a target value adjustment block for updating the first target value at first time instants of those time instants at which a second target value is updated by the power control manner of the transmission power, wherein the first target value depends on the second target value, the second target value being related to an outer loop power control of a transmission power of the downlink signal.

29. (new) An apparatus according to claim 28, further comprising:

a synchronization control block for synchronizing the mobile station with a base station, said synchronization control block arranged to perform the synchronization during the combined slotted communication and measurement mode before selection of a target frequency and/or a target base station(s) for an interfrequency handover.

Allowable Subject Matter

4. Claims 1, 3-23 and 28-29 are allowed.

Regarding independent claim 1 has been amended to overcome the prior arts of record. The prior arts of record Hamalainen et al. (WO 01/31958) and Park et al. (US 6,385,437) fail to

Art Unit: 2617

disclose or render obvious "the first target value depends on a second target value, the second target value being related to an outer loop power control of a transmission power of the downlink signal and updating the first value at first time instants of those time instants at which the second target value is updated by the power control manner of the transmission power", as specified in the claim.

Claims 3-23 depend on claim 1. Therefore, they are allowable.

Regarding new independent claim 28, the prior arts of record Hamalainen et al. (WO 01/31958) and Park et al. (US 6,385,437) fail to disclose or render obvious "the first target value depends on a second target value, the second target value being related to an outer loop power control of a transmission power of the downlink signal and updating the first value at first time instants of those time instants at which the second target value is updated by the power control manner of the transmission power", as specified in the claim.

Claim 29 depend on claim 28. Therefore, they are allowable.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hwang (US 2002/0173329 A1) teach transmit power control (TCP) pattern information in radio link (RL) addition.

Hwang (US 6850770) teach transmit power control (TCP) pattern information in radio link (RL) addition.

Misoshi et al. (US 6,738,646 B2) teach base station device and method for communication.

Okumura (US 2003/0003942 A1) teaches transmit power control method and transmit power control system suitable to mobile communication.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q. Nguyen whose telephone number is 571-272-7844. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bost Dwayne can be reached on (571)272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David Q Nguyen/

Primary Examiner, Art Unit 2617

Application/Control Number: 10/516,641
Art Unit: 2617

Page 9